

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James Storm on 9/30/09.

The application has been amended as follows:

Cancel claims 24 and 27.

Amend Claim 25 : The method as recited in claim [[23]] 20, wherein [[the identified load balancing server]] DNS-LB is situated closest to the [[ISP]] DNS-ISP [[server]] among the [[group of load balancing servers]] DNS-LBs.

Amend Claim 1: A system for performing client-centric load balancing of multiple globally-dispersed servers, the servers being accessed by clients connecting through an ISP having a domain name server (DNS-ISP), the servers further having an authoritative domain name server (DNS-A) associated therewith and an external domain name server (DNS-B), the system comprising: one of a plurality of load balancing domain name servers (DNS-LBs) deployed in a physical proximity from which the network latency of the clients to the multiple globally-dispersed servers is measured, each DNS-LB comprising a processor and memory, the DNS-LBs having stored therein IP address information of the multiple globally-dispersed servers

to be load balanced, the DNS-LBs each sending mapping information to the DNS-B relating the DNS-LB's IP address to an IP address of the DNS-ISP to which the DNS-LB is in a physical proximity from which the network latency of the clients to the globally-dispersed servers is measured, the DNS-LBs determining performance characteristics of each of the multiple globally-dispersed servers, a DNS-LB receiving DNS lookup requests sent from ~-t-s-the DNS-LB's respective physically-proximate clients to the DNS-LB's corresponding DNS-ISP, the DNS lookup requests comprising respective hostnames of some of the globally-dispersed servers and having been directed to the DNS-LB by the DNS-B using the IP address of the DNS-LB in the mapping information at the DNS-B, the DNS-LB using the DNS-LB's measurements of network latency from the clients to the globally-dispersed servers to resolve the DNS lookup requests to respective IP addresses of the some of the globally-dispersed servers, where DNS lookup request's hostname can be resolved to multiple of the IP addresses and the DNS-LB returns to the client the IP address that has lower network latency.

The following is an examiner's statement of reasons for allowance: The independent claims distinguish themselves from the prior art of record by the innovative fashion of load balancing multiple globally dispersed servers utilizing a DNS (Domain Name Service)-LB server.

Although prior art system exist that allow for the load balancing of across multiple sites based on network latency and/or response time, these prior art do not support the mapping of the

DNS-IP addresses to their corresponding DNS-LB addresses so that the DNS-B (Top Level DNS) may direct request to the proper proximately located DNS-LB.

The prior art of Leighton et al (Patent Number 6,108,703) teaches wherein the Top Level DNS builds a network map that utilizes the return address of the request to identify the relevant DNS-location of the lower level DNS server. Leighton et al fails to disclose a mapping relation between the address of the DNS-IP address and their corresponding DNS-LB address. Furthermore, The prior art of record gives no indication that it would have been obvious to one with ordinary skill in the art at the time of the applicant's invention to create a load balancing DNS system in this fashion.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DJENANE M. BAYARD whose telephone number is (571)272-3878. The examiner can normally be reached on Monday- Friday 5:30 AM- 3:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Jr Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. M. B./
Examiner, Art Unit 2444

/William C. Vaughn, Jr./
Supervisory Patent Examiner, Art Unit 2444